# Section 8

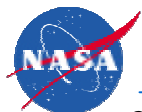# Science/Applications Data Processing and Analysis

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# Science/Applications Data Processing and Analysis

The LWS program combines science and utility.  For this synergy between the science and user communities to flourish, agreements must be reached for pre-processing of data, benchmarking of algorithms, and tailoring of deliverables. These agreements with external groups will be sought at the outset of the program.

Data farming and information extraction from other non-LWS programs are also key ingredients for the success of this effort and will be brought to bear on a broad range of space weather issues.

# Science/Applications Data Processing and Analysis (cont.)

In addition to the theory and modeling elements of the previous section, science will be performed via a parallel data reduction and analysis effort. Specific LWS program data processing and analysis activities that enable basic and applied space weather research will include the following:

- Extraction of select data from existing archives

- Packaging of new and existing data

- Data reduction, visualization, and manipulation routines

- Data correlation from multiple sources

- Calibration program development

*G O D D A R D   S P A C E   F L I G H T   C E N T E R*